DOCUMENT RESUME

ED 420 935 EC 306 497

AUTHOR Williams, Nina; Gonzalez, Virginia

TITLE Identification of Giftedness in Preschoolers: Are Parents' Perceptions Related to Home Environment Factors and Cognitive Assessments?

PUB DATE 1998-04-24

NOTE 6p.; Paper presented at the Annual Meeting of the American Educational Research Association (San Diego, CA, April 13-17, 1998).

PUB TYPE Reports - Research (143) -- Speeches/Meeting Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.

DESCRIPTORS *Cognitive Ability; Educational Attainment; *Environmental Influences; *Family Environment; Family History; *Gifted; Identification; *Parent Attitudes; *Parent Child Relationship; Predictor Variables; Preschool Children; Preschool Education; Socioeconomic Status

ABSTRACT

This paper discusses the results of a study that explored the influence of two major external factors on children's potential giftedness before the identification process is initiated. The study involved 13 children (ages 4-6) and investigated parental perceptions of the influence of internal and/or external factors on their child's cognitive development, whether these parental perceptions of the children's cognitive development are predictive of five home environmental factors (socioeconomic status, time parents spend with their child, parents' work hours, parents' educational level, and number of siblings in the home), and whether these same five home environmental factors are predictive of the child's performance on two cognitive development measures. Parents' perceptions about giftedness were present before the children were identified as gifted and were influenced primarily by one home environmental factor: the level of the father's education. Other factors in the home environment also were shown to have a secondary effect on children's cognitive abilities: the mother's work hours, time parents spent with their child, and the number of siblings in the home. The results indicate both indirect and direct relationships among the physical and psychological home environment, the parental perceptions about giftedness, and the child's cognitive abilities. (CR)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

Identification of Giftedness in Preschoolers: Are Parents' Perceptions Related to Home Environmental Factors and Cognitive Assessments?

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

Gonzalez

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

1

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Nina Williams, M.A. & Virginia Gonzalez, Ph. D.

The University of Arizona

Round Table Paper presented at the AERA 98 Annual Meeting

ED 420 935

Objectives

The purpose of this study is to explore the influence of two major external factors, parental perceptions about cognitive development and home environment, on children's potential giftedness *before* the identification process is initiated. Within a qualitative research design, this study had the objective of identifying and describing parental perceptions about: (1) the meaning of giftedness, and (2) the influence of internal and/or external factors on the development of cognitive giftedness in preschool children. Within a statistical research design, this study had the objective of testing the predictive power of: (1) parental perceptions on five home environmental factors (i.e., SES, time parents spend with their child, parents' work hours, parental level of education, and the number of siblings living in the home); (2) these same five environmental factors on children's performance on two cognitive developmental measures (the Kaufman Assessment Battery for Children, K-ABC, Kaufman & Kaufman, 1983; and the Qualitative Use of Spanish and English Tasks, QUEST, Gonzalez, 1991, 1994, 1995), and on the overall home environment. Finally, these same five home environmental factors were correlated with the children's performance on the same two cognitive developmental measures.

Perspectives

The theoretical framework underlying this study endorses an interactionist developmental position, proposing a relationship between the child's cognitive development and the stimulation provided by parents within the psychological home environment (e.g., Banks & McGee-Banks, 1993; Bloom, 1985). In this sense, we believe that the extrinsic influences, imposed by the parental perceptions within the context of the home environment, could be one of the most crucial in the formation of a child's intelligence development. This study focuses on several home environmental factors that: (1) might contribute to the cognitive development of children; and (2) have been found in the literature to be related to parental perceptions about what defines and constitutes giftedness. Traditional and contemporary theories have been used in describing the effect that home environments can have on children's cognitive development, with the

EC 306497

assumption that parental perceptions emerged only *after* the identification of their child's giftedness. We recognize that the parental SES factor, identified by traditional literature, has an influence on the tangible resources available at the physical home environment of gifted children. We also recognize that the parents' behaviors, identified by contemporary literature (see e.g., Harrison, 1990) as four major home environmental factors (i.e., time parents spend with their child, parents' work hours, parental level of education, and the number of siblings living in the home) have a powerful effect on gifted children's development. However, we also argue that these four home environmental factors, identified by contemporary research, represent a *reflection of parental perceptions*; which in turn create a specific *psychological* home environment that stimulates the children's cognitive potential. Furthermore, it is our argument that parental perceptions are *pre-existing* environmental influences to the child's giftedness. That is, it is our position that parental perceptions are not a result of labeling the child as gifted, but rather *pre-exist* the giftedness identification process. We propose that it is important to identify parental perceptions about giftedness even *before* the child is identified, because: (1) the parents may already display certain *typical* perceptions of the cognitive development of their child, and at the same time (2) these *typical* parental perceptions may contribute to the creation of a home environment influencing positively the development of cognitive giftedness in a child.

Methodology

Research Questions. Within a qualitative design, this study identified and described parental perceptions about their child's cognitive development, in relation to two research questions: (1) What are the parental perceptions about the meaning of giftedness?, (2) What are the parental perceptions of the influence of internal and/or external factors on their child's cognitive development? Then, within a quantitative design, four more research questions were tested statistically with a multiple regression and a correlation model: (3) Are parental perceptions of the children's cognitive development predictive of five home environmental factors (i.e., SES, time parents spend with their child, parents' work hours, parents' educational level, and number of siblings in the home)?, (4) Are these same five home environmental factors predictive of the child's performance on two cognitive developmental measures (K-ABC and QUEST)?, (5) Are these same five home environmental factors predictive of the overall home environment (as measured by the American Guidance Service Home Survey, Harrison, 1990)?, and (6) Is there a relation between these same five home environmental factors and the child's performance on two cognitive developmental measures (K-ABC and QUEST)?

Subjects. The pool of subjects was selected from children attending a private preschool in a middle-size metropolitan area in the Southwest region of the US, in which there were no identified gifted children. The pool of subjects was comprised of 60 children who came from middle-high SES homes. The sample was selected based on several criteria: (1) the child was presently attending the preschool; (2) a parent consented to their child's participation in the study; (3) the child was referred for potential giftedness by a parent and/or teacher; and (4) the child was not already identified as gifted. The referrals were received from 9 parents, 3 parents and teachers, and 1 teacher. The final sample consisted of 13 children, 8 girls and 5 boys, whose ages ranged from 4 years, 1 month to 6 years, 5 months. The children's ethnicity was primarily Caucasian (11, 84.6%), with one African-American child adopted by White parents, and one Chinese-Thai child. All children in the sample lived in a two-parent household.

Instruments. The qualitative research questions are addressed by four screening instruments: (1) a parents' survey for their child's referral for giftedness evaluation, used for sample selection and for identifying parental perceptions about the meaning of giftedness; (2) a teacher's survey for the referral of potentially gifted children, used for sample selection; and (3) parent interview questions, used for identifying parental perceptions about internal/external factors influencing children's cognitive development. These three instruments were developed by the authors. The statistical research questions are addressed by the use of five instruments: (1) the Home Survey (Harrison, 1990), used for identifying the overall home environment; (2) a demographic questionnaire, developed by the authors, for gathering data on the five home environmental factors; (3) parent interview questions, also developed by the authors, for identifying parental perceptions; (4) K-ABC (Kaufman & Kaufman, 1983); and (5) QUEST (Gonzalez, 1991, 1994, 1995).

Procedure. Parents and teachers referred children for giftedness, filling out the surveys. Each child was observed in the classroom prior to the administration of the K-ABC by trained graduate educational psychology students. Then, QUEST was administered individually, only in English, to the children by the second author. Finally, a demographic questionnaire was filled out by a parent, previously to the parent home interview conducted by the first author.

Data Source

Nominal categories based on developmental stages were developed using Piaget's theory, with the purpose of coding the parents' survey responses about the meaning of giftedness. The parental perceptions about the influence of external/internal factors on a child's cognitive

development, revealed in the interviews, were also coded using nominal categories. Descriptive non-parametric statistics were used for reporting the children's demographic characteristics, home environmental factors, scores on the K-ABC, and performance on the QUEST. Finally, statistical analyses, regression and correlation models, were used for testing if: (1) parental perceptions, uncovered in the qualitative data, were predictive of the five home environmental factors previously identified by traditional (i.e., SES) and contemporary research (i.e., time parents spend with their child, parents' work hours, parental level of education, and the number of siblings living in the home); (2) these same five environmental factors were predictive of the children's performance on two cognitive developmental measures (K-ABC, Kaufman & Kaufman, 1983; and QUEST, Gonzalez, 1995), and of the overall home environment; and (3) these same five home environmental factors were correlated with the children's performance on two cognitive developmental measures (K-ABC, Kaufman & Kaufman, 1983; and QUEST, Gonzalez, 1991, 1994, 1995).

Results and Conclusions

Combining the results of the qualitative and statistical analyses of parental perceptions and home environmental factors on the children's cognitive development, a major conclusion was visible: parental perceptions about "giftedness" are present *before* a child is identified as gifted, which in turn are influenced primarily by one home environmental factor: the level of the father's education. Other factors in the home environment also were shown to have a secondary effect on children's cognitive abilities: (a) mother's work hours, (b) time parents spend with their child, and (c) number of siblings in the home. In addition, all the interactions found among factors can be considered reciprocal in causation. It appeared to be indirect and direct relationships between the physical and psychological home environment, the parental perceptions about giftedness, and the child's cognitive abilities. That is, the kind of home environment that affects a child's cognitive development, may be also influenced by the perceptions and behaviors that a parent has *before* the child is identified as "gifted." The importance of the parental perceptions for the creation of a home environment was demonstrated by most parents' belief that cognitive development is influenced, at least partially, by the environment. Moreover, the children's performance on the K-ABC and QUEST, and the parental perceptions expressed in the surveys and interviews, coincided for most of the children, providing evidence for the criterion-referenced and construct validity of all the instruments used.

Theoretical and Practical Significance of the Study

This study contributes to the extensive literature on the description of gifted children's and home environment characteristics by investigating two novel factors: (1) the influence of parental perceptions on the creation of a *psychological* home environment for the development of children's potential for giftedness, and (2) the *pre-existing* nature of parental perceptions on cognitive development to the children's identification of giftedness. The multidimensional perspective on the measurement of external factors affecting cognitive giftedness in young children, also contributes to contemporary literature as well as evaluation practices. Results highlight the importance of including parents and teachers, and alternative assessments of cognitive development, in the identification process of potentially gifted children.

References

Banks, J. A., & McGee-Banks, C. A. (1993). Multicultural education: Issues and perspectives (2nd ed.). Massachusetts: Allyn & Bacon.

Bloom, B. S. (1985). Developing talent in young people. New York: Ballantine.

Gonzalez, V. (1991). A model of cognitive, cultural, and linguistic variables affecting bilingual Spanish/English children's development of concepts and language. Doctoral Dissertation. Austin, Texas: The University of Texas at Austin. (ERIC Document Reproduction Service No. ED 345 562).

Gonzalez, V. (1994). A model of cognitive, cultural, and linguistic variables affecting bilingual Spanish/English children's development of concepts and language. Hispanic Journal of Behavioral Sciences, 16 (4), 396-421.

Gonzalez, V. (1995). A model of cognitive, cultural and linguistic variables affecting bilingual Hispanic children's development of concepts and language. Austin & Winfield: Bethesda, MR.

Harrison, P. L. (1990). The manual for the American Guidance Service early screening profiles. Circle Pines, MN: American Guidance Service.